

VARIABLE PITCH MANIFOLD FOR ROTOR COOLING IN AN ELECTRICAL MACHINE

Abstract

A rotor in an electrical machine, the rotor comprises a magnetic core having at least two poles, a plurality of winding assemblies, one for each pole, and a cylindrical tube enclosing the magnetic core and winding assemblies, the tube including a plurality of rings having different axial widths. Each of the rings is axially spaced apart from an adjacent ring. The respective axial widths of the rings become progressively smaller than the axial width of the ring axially located at or near the center of the tube as the axial distance away from the center of the tube increases. A plurality of winding braces are coupled to at least one of the winding assemblies, the winding braces having different radial heights.